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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,676	06/24/2003	Tatsuya Ishizaki	8373.308US01	8242
23552	7590	05/04/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			TRAN, DALENA	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,676

Applicant(s)

ISHIZAKI ET AL.

Examiner

Dalena Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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10/668,676

EXAMINER

ART UNIT	PAPER
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20050429

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

DETAILED ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 2/22/05. As per request, claims 1, and 3 have been amended. Thus, claims 1-5 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, are rejected under 35 U.S.C.103(a) as being unpatentable over Hermann et al. (6,113,138) in view of Hayashi et al. (6,216,070), and Watanabe et al. (6,125,313).

As per claim 1, Hermann et al. disclose an impact determination system for detecting an impact of a vehicle with an object and outputting an actuating signal to collision mitigating devices, system comprising: a plurality of acceleration sensors for mounting to a front portion of vehicle to detect accelerations of movement of front portion in the vehicle longitudinal direction (see column 5, line 59 to column 6, line 6), an actuation permitting for outputting an actuation permitting signal for a fixed time period when one of acceleration sensors detects an acceleration equal to or more than a set value within a set time after another acceleration sensors detects an acceleration equal to or more than a set value within a set value (see column 7, line 50 to column 8, line 17), and an actuating signal outputting for outputting an actuating signal to collision mitigating devices when receiving both an actuation permitting signal from actuation permitting and an impact detecting signal (see column 7, lines 31-49). Hermann et al. do not disclose a

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collision detecting. However, Hayashi et al. disclose a collision detecting for outputting a collision detection signal when determining that a collision with a given objects occurs based on acceleration detected by at least one of acceleration sensor (see column 6, line 28 to column 7, line 28). Hermann et al. also do not disclose plurality of timers. However, Watanabe et al. disclose plurality of timers, each of timers being associated with a respective one of the acceleration sensors, each of timers holding for the set time signal representing the acceleration detected by the associated acceleration sensor which is equal to or more than the set value (see columns 5-6, lines 43-39; column 7, lines 11-67; columns 9-10, lines 66-58; and columns 13-14, lines 22-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Hermann et al. by combining a collision detecting for outputting a collision detection signal for judging an accident occurs and accurately actuating a collision mitigating device to protect the passenger of the vehicle, and combining a plurality of timers to determine a ignition timing of the collision mitigating device to improve occupant safety.

Also, as per claim 2, Hayashi et al. disclose a control unit including actuation permitting, collision detecting, and actuating signal outputting means is mounted in a position different from that of acceleration sensor (see column 6, lines 9-27).

As per claim 3, Hermann et al. disclose an impact determination system for detecting an impact of a vehicle with an object and outputting an actuating signal to collision mitigating devices, system comprising: a plurality of acceleration sensors for mounting to a front portion of vehicle to detect accelerations of movement of front portion in the vehicle longitudinal direction (see column 5, line 59 to column 6, line 6), a plurality of acceleration comparing provided in

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correspondence with respective acceleration sensor to determine whether or not detected accelerations are equal to or more than a set value (see column 7, line 50 to column 8, line 17), an actuating signal outputting for outputting an actuating signal when determining that any of impact detecting detects an impact (see column 2, lines 1-24) and any of acceleration comparing means referring to the corresponding acceleration sensor which is different from the acceleration sensor referred to by impact detecting the impact has detected an acceleration equal to or more than the set value during a predetermined past time period before the impact detection (see column 8, lines 18-65). Hermann et al. do not disclose a collision detecting. However, Hayashi et al. disclose a plurality of collision detecting provided in correspondence with respective acceleration sensors to perform calculation with detected accelerations detected by acceleration sensors, thereby to detect a collision of vehicle with object (see column 6, line 28 to column 7, line 28). Hermann et al. also do not disclose plurality of timers. However, Watanabe et al. disclose plurality of timers, each of timers being associated with a respective one of the acceleration sensors, each of timers holding for the set time signal representing the acceleration detected by the associated acceleration sensor which is equal to or more than the set value (see columns 5-6, lines 43-39; column 7, lines 11-67; columns 9-10, lines 66-58; and columns 13-14, lines 22-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Hermann et al. by combining a collision detecting for outputting a collision detection signal for judging an accident occurs and accurately actuating a collision mitigating device to protect the passenger of the vehicle, and combining a plurality of timers to determine a ignition timing of the collision mitigating device to improve occupant safety.

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As per claim 4, Hermann et al. disclose actuating signal outputting outputs an actuating signal under such conditions that any of impact detecting detects an impact and the acceleration comparing referring to the acceleration sensor mounted adjacent to the acceleration sensor referred to by impact detecting means detecting the collision has detected an acceleration equal to or more than the set value during the predetermined past time period before the impact detection (see column 6, lines 7-51).

As per claim 5, Hayashi et al. disclose a control unit including actuation permitting, collision detecting, and actuating signal outputting means is mounted in a position different from that of acceleration sensor (see column 6, lines 9-27).

Remarks

4. Applicant's argument filed on 1/19/05 has been fully considered. Upon updated search, the new ground of rejection has been set forth as above as the result of the new amended claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Dalena Tran

A handwritten signature in cursive script, appearing to read 'Dalena Tran', written in black ink.

April 29, 2005